



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,332	08/23/2004	Atsushi Hatabu	18133	3772

7590 11/02/2007
Paul J Esatto Jr
Scully Scott Murphy & Presser
400 Garden City Plaza
New York, NY 11530

EXAMINER

HOLDER, ANNER N

ART UNIT	PAPER NUMBER
----------	--------------

2621

MAIL DATE	DELIVERY MODE
-----------	---------------

11/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/505,332

Applicant(s)

HATABU ET AL.

Examiner

Anner Holder

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/23/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 08/06/07 have been fully considered but they are not persuasive. In regards to Applicant's argument concerning Kuriacose, examiner respectfully disagrees. Applicants cited Col. 4 Lines 20-44, does not refer to decoding of HP or LP. However Col. 5 Lines 26-45 state that two signals corresponding to HP and LP are decompressed.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 27-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 27-30 defines a "moving picture transmission program for enabling a computer processor" embodying functional descriptive material. However, the claim does not define a computer-readable medium or computer-readable memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – MPEP 2106.01 I). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests amending the claim(s) to embody the computer program on "computer-readable medium" or equivalent; assuming the

Art Unit: 2621

specification does NOT define the computer readable medium as a “signal”, “carrier wave”, or “transmission medium” which are deemed non-statutory (refer to “note” below). Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

A “signal” (or equivalent) embodying functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Rather, “signal” is a form of energy, in the absence of any physical structure or tangible material.

Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a “signal”, the claim as a whole would be non-statutory. In the case where the specification defines the computer readable medium or memory as statutory tangible products such as a hard drive, ROM, RAM, etc, as well as a non-statutory entity such as a “signal”, “carrier wave”, or “transmission medium”, the examiner suggests amending the claim to include the disclosed tangible computer readable media, while at the same time excluding the intangible media such as signals, carrier waves, etc.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2621

Claims 1, 4, 6, 8, 9, 17-20, 27, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Aharoni et al. (Aharoni) US 6,014,694.

6. As to claim 1, Aharoni teaches a moving picture transmission system comprising a transmission side sending encoded moving picture data and one or plural reception sides decoding the encoded moving picture data, [Abstract; Col. 2 Lines 16-28; Fig. 2] said transmission side compresses input moving picture frames into a plurality of encoded data at multiple compression ratios and sends said plurality of encoded data, [Abstract; Col. 2 Lines 16-28; Col. 6 Lines 64-65] and said transmission side sends, as said plurality of encoded data comprising primary encoded data produced by compressing the input moving picture frames using interframe prediction, [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract] and encoded data produced by compressing the input moving picture frames at one or plural compression ratios which are higher than said primary encoded data using interframe prediction referring to frames positioned at the same time as the reference frames referred to in the interframe prediction of said primary encoded data; [Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39] and each one of said reception sides selects one of encoded data with frame-by-frame selection from the plurality of encoded data received by the reception side without error and decodes the selected encoded data. [Fig. 9; Col. 11 Lines 49-65; Col. 7 Lines 20-23]

7. As to claim 4, Aharoni teaches said transmission side sends a plurality of encoded data comprising all compression encoded data or encoded data of selected frames. [Abstract; Figs. 1-3; Col. 23 Lines 47-61; Col. 5 Lines 14-26; Col. 6 Lines 46-50]

8. As to claim 6, Aharoni teaches A moving picture transmission system comprising a transmission side sending encoded moving picture data and one or plural reception sides

Art Unit: 2621

decoding the encoded moving picture data, [Abstract; Col. 2 Lines 16-28; Figs. 2-3] wherein said transmission side sends a plurality of encoded data comprising primary packet data produced by compressing input moving picture frames into one or plural packets and one or plural packet data produced by compressing the same image area as contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primal packet data; [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract; Col. 2 Lines 44-65; Fig. 2; Col. 6 Lines 61-66] and each one of said reception sides selects either one of the encoded data with packet-by-packet selection from the plurality of encoded packet data received by said transmission reception side without error, and decodes the selected encoded data. [Fig. 9; Col. 11 Lines 49-65; Col. 7 Lines 20-23]

9. As to claim 8, Aharoni teaches said transmission side sends a plurality of encoded data comprising primary packet data produced by compressing input moving picture frames into one or plural packets using interframe prediction, [Fig. 9; Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract; Col. 2 Lines 44-65; Fig. 2; Col. 6 Lines 61-66] and one or plural packet data produced by compressing the same image area contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primary packet data using interframe prediction referring to frames positioned at the same time as the reference frames referred to in the interframe prediction of said primary packet data. [Col. 5 Lines 4-9, Lines 17-26; Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39; Fig. 9]

10. As to claim 9, Aharoni teaches said transmission side sends a plurality of encoded data comprising all compression-encoded packet data or selected packet data. [Abstract; Figs. 1-3;

Art Unit: 2621

Col. 3 Lines 47-61; Col. 5 Lines 14-26; Col. 6 Lines 46-50; Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract; Col. 2 Lines 44-65; Fig. 2; Col. 6 Lines 61-66]

11. As to claim 17, Aharoni teaches A moving picture encoding apparatus for compressing moving picture data and sending the encoded data to one or plural moving picture decoding apparatuses, [Abstract; Col. 2 Lines 16-28; Fig. 2] wherein the moving picture encoding apparatus sends, to said moving picture decoding apparatuses, a plurality of encoded data comprising primary encoded data produced by compressing the input moving picture frames using interframe prediction, [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract] and encoded data produced by compressing the input moving picture frames at one or plural compression ratios which are higher than said primary encoded data using interframe prediction referring to frames positioned at the same time as the reference frames referred to in the interframe prediction of said primary encoded data. [Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39]

12. As to claim 18, Aharoni teaches the moving picture encoding apparatus sends a plurality of encoded data comprising all encoded data or encoded data of selected frames. [Abstract; Figs. 1-3; Col. 3 Lines 47-61; Col. 5 Lines 14-26; Col. 6 Lines 46-50]

13. As to claim 19, Aharoni teaches a moving picture encoding apparatus for compressing moving picture data and sending the encoded data to one or plural moving picture decoding apparatuses, wherein the moving picture encoding apparatus sends, to said moving picture decoding apparatuses, a [Abstract; Col. 2 Lines 16-28; Figs. 2-3] plurality of encoded data comprising primary packet data produced by compressing input moving picture frames using interframe prediction, [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract] and one or plural packet

Art Unit: 2621

data produced by compressing the same image area as contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primary packet data using interframe prediction referring to frames positioned at the same time as reference frames referred to in the interframe prediction of said primary packet data. [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract; Col. 2 Lines 44-65; Fig. 2; Col. 6 Lines 61-66]

14. As to claim 20, Aharoni teaches the moving picture encoding apparatus sends a plurality of encoded data comprising all encoded data or selected packet data. [Abstract; Figs. 1-3; Col. 3 Lines 47-61; Col. 5 Lines 14-26; Col. 6 Lines 46-50]

15. As to claim 27, Aharoni teaches a moving picture transmission system having a moving picture transmission program for enabling a computer processor to encode moving picture data and send encoded data at a transmission side, and enabling a computer processor to receive and decode the encoded data at reception sides, [Abstract; Col. 2 Lines 16-28; Fig. 2] wherein said moving picture transmission program enables the computer processor at the transmission side to compress input moving picture frames into a plurality of encoded data at multiple compression ratios and sends the encoded data, [Abstract; Col. 2 Lines 16-28; Col. 6 Lines 64-65] and enables the computer processor at said reception side to select any one encoded data with frame-by-frame selection from the plurality of properly received encoded data and decode the selected encoded data. [Fig. 9; Col. 11 Lines 49-65; Col. 7 Lines 20-23]

16. As to claim 29, Aharoni teaches A moving picture transmission system having a moving picture transmission program for enabling a computer processor to encode moving picture data and send the encoded data at a transmission side, and enabling a computer processor to receive and decode the encoded data at a reception side, [Abstract; Col. 2 Lines 16-28; Figs. 2-3]

Art Unit: 2621

wherein said moving picture transmission program enables the computer processor at the transmission side to send a plurality of encoded data comprising primary packet data produced by compressing input moving picture frames and one or plural packet data produced by compressing the same image area as contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primary packet data, [Col. 9 Lines 35-39; Col. 2 Lines 16-28; Abstract; Col. 2 Lines 44-65; Fig. 2; Col. 6 Lines 61-66] and enables the computer processor at said reception side to select either one of the encoded data with packet-by-packet selection from the plurality of properly received encoded data, and decode the selected encoded data. [Fig. 9; Col. 11 Lines 49-65; Col. 7 Lines 20-23]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2, 5, 7, 10, 13, 14, 23, 24, 28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni et al. (Aharoni) US 6,014,694 in view of Kuriacose et al. (Kuriacose) US 5,111,292.

18. As to claim 2, Aharoni teaches said transmission side compresses input moving picture frames into a plurality of encoded data at multiple compression ratios and assigns a priority order to each data of said encoded data subject to a predetermined assignment rule, and sends said plurality of encoded data; [Col. 6 Lines 61-66; Abstract; Col. 2 Lines 29-65; Col. 7 Lines 7-23]

Art Unit: 2621

and each one of said reception sides selects the encoded data having the highest priority order with frame-by-frame selection from the plurality of encoded data received by the reception side without error and decodes the selected encoded data. [Col. 2 Lines 29-43; Col. 7 Lines 7-23; Col 9 Lines 57-64; Fig. 9]

Aharoni does not specifically teach the selection of frames based on priority.

Kuriacose teaches the selection of video frames based on priority. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

19. As to claim 5, Aharoni said reception side selects the encoded data having the lowest compression ratio and decodes the selected encoded data. [Abstract; Fig. 2; Fig. 9; Col. 11 Lines 49-65; Col. 11 Line 67 Col. 12 Line 10]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of

Art Unit: 2621

Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

20. As to claim 7, Aharoni teaches said transmission side sends a plurality of encoded data comprising primary packet data produced by compressing input moving picture frames into one or plural packets, [Col. 5 Lines 4-9, Lines 17-26] and one or plural packet data produced by compressing the same image area contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primal packet data, [Col. 5 Lines 4-9, Lines 17-26; Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39] each of said packet data being assigned priority order subject to a predetermined assignment rule; [Col. 5 Lines 4-9, Lines 17-26; Col. 6 Lines 61-66; Abstract; Col. 2 Lines 29-65; Col. 7 Lines 7-23] and each one of said reception sides selects the encoded packet data having the highest priority order with packet-by-packet selection from the plurality of packet data received by said reception side without error, and decodes the selected encoded data. [Col. 5 Lines 4-9, Lines 17-26; Col. 2 Lines 29-43; Col. 7 Lines 7-23; Col 9 Lines 57-64; Fig. 9]

Aharoni does not specifically teach the selection based on priority.

Kuriacose teaches the selection of based on priority. [Abstract; Col. 5 Lines 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

Art Unit: 2621

21. As to claim 10, Aharoni teaches each of said reception sides selects the packet data having the lowest compression ratio and decodes the selected encoded data. [Abstract; Fig. 2; Fig. 9; Col. 11 Lines 49-65; Col. 11 Line 67 Col. 12 Line 10]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

22. As to claim 13, Aharoni teaches a moving picture encoding apparatus as said transmission side and one or plural moving picture decoding apparatuses as said reception sides; [Fig. 2; Fig. 1; Col. 2 Lines 16-24; Abstract] said moving picture encoding apparatus having: a plurality of encoding means for compressing input moving picture frames into a plurality of encoded data at multiple compression ratios and sending the encoded data; [Fig. 2 Col. 2 Lines 16-24, 44-65; Fig. 15; Abstract; Col. 6 Lines 61-66] each one of said moving picture decoding apparatuses having: a plurality of encoded-data- receiving means for receiving the plurality of encoded data which have been sent and detecting bit errors or packet losses of the received encoded data; [Fig. 2; Col. 2 Lines 16-24; Col. 13 Lines 40-57] a selecting mean for selecting the encoded data of the lowest compression ratio from the encoded data which have been received free of bit errors or packet losses by said encoded-data-receiving means with frame-by-frame

Art Unit: 2621

selection; [Fig. 3; Col. 13 Lines 487-51, 54-57; Abstract; Fig. 2; Fig. 9; Col. 11 Lines 49-65; Col. 11 Line 67 - Col. 12 Line 10] and a decoding mean for decoding the encoded data selected by said selecting mean. [Abstract; Col. 2 Lines 16-24; Col. 6 Lines 45-50]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

23. As to claim 14, Aharoni teaches a moving picture encoding apparatus as said transmission side and one or plural moving picture decoding apparatuses as said reception sides; [Fig. 2; Fig. 1; Col. 2 Lines 16-24; Abstract] said moving picture decoding apparatus having: a plurality of encoding means for compressing input moving picture frames into a plurality of encoded data at multiple compression ratios and sending the encoded data; [Fig. 2; Col. 2 Lines 16-24; Col. 13 Lines 40-57] said moving picture encoding apparatus having: a plurality of encoded-data-receiving means for receiving the plurality of encoded data which have been sent and detecting bit errors or packet losses of the received encoded data; a selecting mean for selecting the encoded data of the lowest compression ratio from the encoded data which have been received free of bit errors or packet losses by said encoded-data-receiving means with packet-by-packet selection; [Fig. 3; Col. 13 Lines 487-51, 54-57; Abstract; Fig. 2; Fig. 9; Col. 11

Art Unit: 2621

Lines 49-65; Col. 11 Line 67 Col. 12 Line 10] and a decoding mean for decoding the encoded data selected by said selecting mean. [Abstract; Col. 2 Lines 16-24; Col. 6 Lines 45-50]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

24. As to claim 23, Aharoni teaches a moving picture decoding apparatus for receiving data produced by compressing moving picture data from a moving picture encoding apparatus and decoding the received data, [Fig. 2; Fig. 1; Col. 2 Lines 16-24; Abstract] wherein the moving picture decoding apparatus receives a plurality of encoded data comprising primary encoded data produced by compressing input moving picture frames using interframe prediction, [Abstract; Col. 2 Lines 16-28; Col. 9 Lines 35-39] and encoded data produced by compressing the input moving picture frames at one or plural compression ratios which are higher than said primary encoded data using interframe prediction referring to frames positioned at the same time as the reference frames used in the interframe prediction of said primary encoded data, [Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39] and selects the encoded data having the lowest compression ratio with frame-by-frame selection from said encoded data free

Art Unit: 2621

of bit errors or packet losses of the received encoded data, and decodes the selected encoded data. [Fig. 3 Col. 13 Lines 48-51; 54-57]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

25. As to claim 24, Aharoni teaches a moving picture decoding apparatus for receiving data produced by compressing moving picture data from a moving picture encoding apparatus and decoding the received data, [Fig. 2; Fig. 1; Col. 2 Lines 16-24; Abstract] wherein the moving picture decoding apparatus receives a plurality of encoded data comprising primary packet data produced by compressing input moving picture frames using interframe prediction, [Abstract; Col. 2 Lines 16-28; Col. 9 Lines 35-39] and one or plural packet data produced by compressing the same image area as contained in each packet of said primary packet data at one or plural compression ratios which are higher than said primary packet data using interframe prediction referring to frames positioned at the same time as the reference frames referred in the interframe prediction of said primary packet data, [Col. 2 Lines 44-65; Abstract; Fig. 2; Col. 6 Lines 61-66; Col. 9 Lines 35-39] and selects the encoded data having the lowest compression ratio with packet-by-packet selection from said encoded data free of bit errors or packet losses of the

Art Unit: 2621

received encoded data, and decodes the selected encoded data. [Fig. 3 Col. 13 Lines 48-51; 54-57]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

26. As to claim 28, Aharoni teaches said moving picture transmission program enables the computer processor at said reception side to select the encoded data having the lowest compression ratio with frame-by-frame selection from the plurality of properly received encoded data and decode the selected encoded data. [Abstract; Fig. 2; Fig. 9; Col. 11 Lines 49-65; Col. 11 Line 67 Col. 12 Line 10]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of

Art Unit: 2621

Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

27. As to claim 30, Aharoni teaches said moving picture transmission program enables the computer processor at said reception side to select the encoded data having the lowest compression ratio with packet-by-packet selection from the plurality of properly received encoded data and decode the selected encoded data. [Abstract; Fig. 2; Fig. 9; Col. 11 Lines 49-65; Col. 11 Line 67 Col. 12 Line 10]

Aharoni does not explicitly teach the selection of the lowest compression ratio.

Kuriacose teaches the selection of the lowest compression ratio. [Abstract; Col. 5 6-45; Obvious though the use of programming either the high or low priority signal can be selected]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the priority teachings of Kuriacose with the video transporting device of Aharoni to allow for the structure of data within the system by priority setting and improving image quality.

28. Claims 11, 12, 15, 16, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni et al. (Aharoni) US 6,014,694 in view of Veltman US 5,481,543.

29. As to claim 11, Aharoni teaches the limitations of claim 1.

30. (Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.

Aharoni does not specifically teach time differences added therebetween and sends the multiplexed encoded data.

Art Unit: 2621

Veltman teaches time differences added therebetween and sends the multiplexed encoded data. [Fig. 22A]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Veltman with the transmission device of Aharoni to allow for improve the compression and quality of video data.

31. As to claim 12, Aharoni teaches the limitations of claim 8.

(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.

Aharoni does not specifically teach time differences added therebetween and sends the multiplexed encoded data.

Veltman teaches time differences added therebetween and sends the multiplexed encoded data. [Fig. 22A]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Veltman with the transmission device of Aharoni to allow for improve the compression and quality of video data.

32. As to claim 15, Aharoni (modified by Veltman) teaches said transmission side has delay-adding means for delaying part of said encoded data to add the time differences between [Veltman – Col. 9 Lines 52-55, 63-67; Fig. 22A] said plurality of encoded data, and multiplexing means for multiplexing said plurality of encoded data with the time differences added therebetween [Fig. 22A] and sending the multiplexed encoded data, and each one of said reception sides has demultiplexing means for demultiplexing the multiplexed and sent data into a

Art Unit: 2621

plurality of encoded data. [(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.]

33. As to claim 16, Aharoni teaches said transmission side has delay-adding means for delaying part of said encoded data to add the time differences between [Veltman – Col. 9 Lines 52-55, 63-67; Fig. 22A] said plurality of encoded data, and multiplexing means for multiplexing said plurality of encoded data with the time differences added therebetween [Fig. 22A] and sending the multiplexed encoded data, and each one of said reception sides has demultiplexing means for demultiplexing the multiplexed and sent data into a plurality of encoded data. [(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.]

34. As to claim 21, Aharoni teaches delay-adding means for delaying part of said encoded data to add [Veltman – Col. 9 Lines 52-55, 63-67; Fig. 22A] the time differences between [Fig. 22A] said plurality of encoded data, and multiplexing means for multiplexing said plurality of encoded data with the time differences added therebetween and sending the multiplexed encoded data. [(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.]

35. As to claim 22, Aharoni teaches delay-adding means for delaying part of said encoded data [Veltman – Col. 9 Lines 52-55, 63-67; Fig. 22A] to add the time differences between [Fig. 22A] said plurality of encoded data, and multiplexing means for multiplexing said plurality of encoded data with the time differences added therebetween and sending the multiplexed encoded data. [(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.]

Art Unit: 2621

36. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni et al. (Aharoni) US 6,014,694 in view of Kuriacose et al. (Kuriacose) US 5,111,292 further in view of Veltman US 5,481,543.

37. As to claim 25, Aharoni (modified by Kuriacose) teach the limitations of claim 23.

(Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.

Aharoni (modified by Kuriacose) does not specifically teach time differences added therebetween and sends the multiplexed encoded data.

Veltman teaches time differences added therebetween and sends the multiplexed encoded data. [Fig. 22A]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Veltman with the transmission device of Aharoni (modified by Kuriacose) to allow for improve the compression and quality of video data.

38. As to claim 26, Aharoni (modified by Kuriacose) teach the limitations of claim 24. (Official Notice) it is well known in the art to use multiplexes in encoding and demultiplexes in decoding.

Aharoni (modified by Kuriacose) does not specifically teach time differences added therebetween and sends the multiplexed encoded data.

Veltman teaches time differences added therebetween and sends the multiplexed encoded data. [Fig. 22A]

Art Unit: 2621

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Veltman with the transmission device of Aharoni (modified by Kuriacose) to allow for improve the compression and quality of video data.

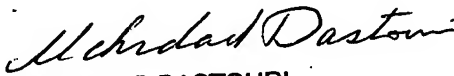
Conclusion

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anner Holder whose telephone number is 571-270-1549. The examiner can normally be reached on M-Th, M-F 8 am - 3 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANH 10/15/07


MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600